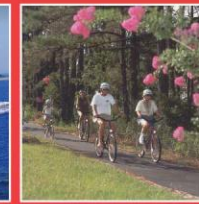
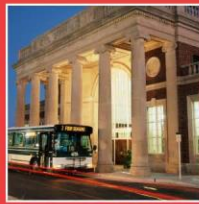
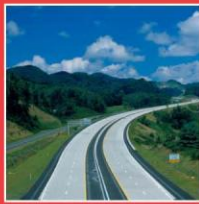




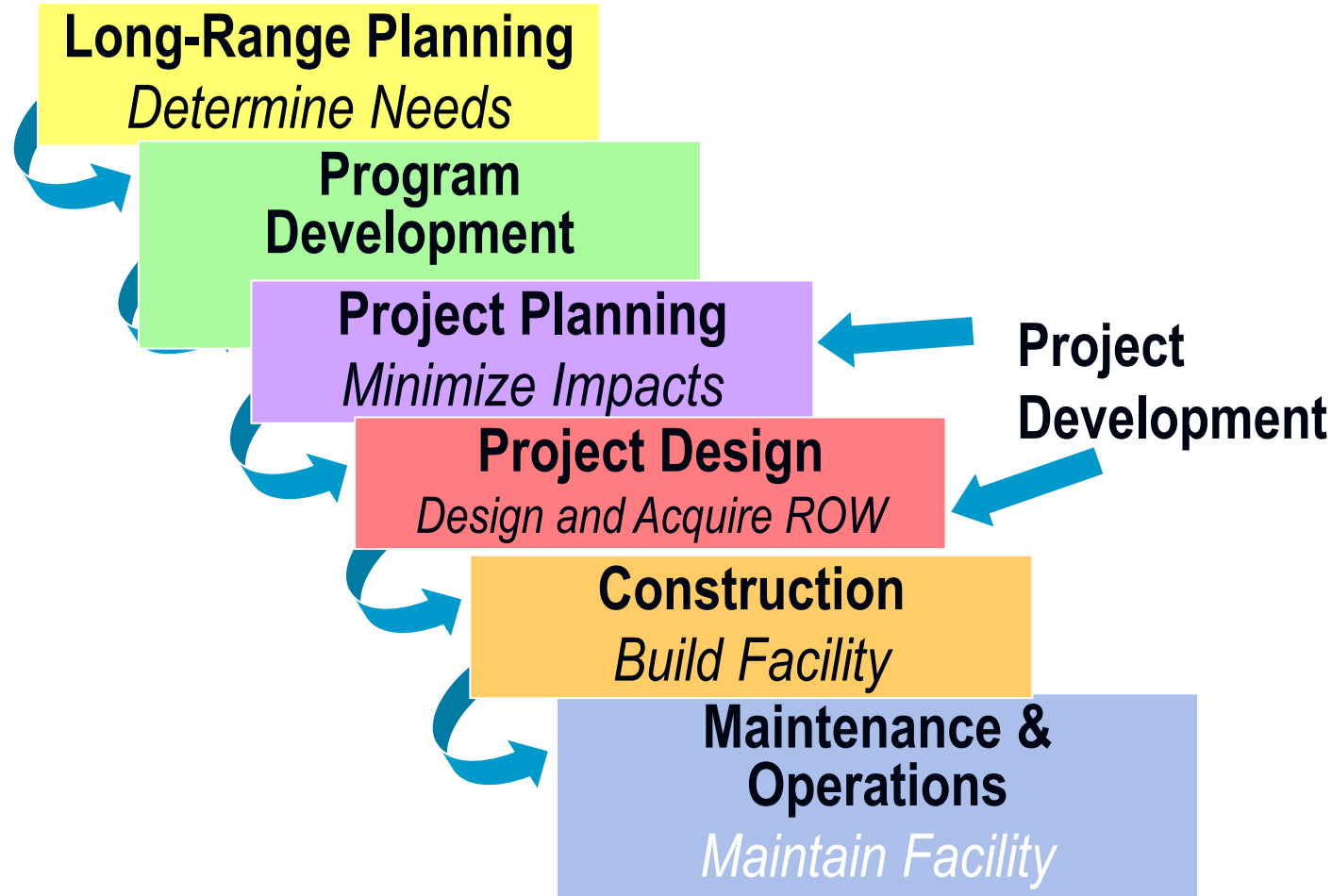
Joint Legislative Transportation Oversight Committee Meeting

November 4, 2011

Highway Administrator, Terry Gibson



Transportation Program Life Cycle





Project Development Process

- Federally mandated
- Must be a collaborative process
- Must obtain input from stakeholders
- Success of project depends upon approvals and agreements by others





Project Planning Major Steps

- Identify Transportation Purpose and Need
- Project Study Area is Determined
- Environmental & Community Features Identified
- Develop alternatives to minimize impacts (generally 800 to 1000 feet corridor widths)





Project Planning Major Steps

- Develop preliminary highway designs within corridors
- Evaluate impacts
- Coordinate with project stakeholders (agencies & public)
- Select preferred alternative
- Complete all environmental planning documents to comply with National Environmental Policy Act





NEPA Documentation

- Completion and approval of NEPA documents generally conclude the project planning process
- Environmental Impact Statements (usually required for new location projects)
- Environmental Assessment and Finding of No Significant Impacts (typically done for widening projects)
- Categorical Exclusions (typically done for bridge replacement projects)





Project Design Major Steps

- Location and Surveys provides survey information and plan sheets are developed for chosen alternative
- Design is finalized
- Construction limits are determined
- Right of way limits set





Roadway Design



Culvert Design



Retaining Walls



Structure Design





Acquire Right of Way

- NEPA documents and designs must be completed and approved first
- Right of way acquisitions are completed before construction begins (or rights to enter property obtained)
- Utility Coordination is completed during right of way acquisition to adjust those utilities that are in conflict with roadway construction





Obtain Environmental Permits

- New process helps speed this step up
 - Work during project development with stakeholders/permitting agencies to create design
- Purchase offsite mitigation when necessary





NCDOT Contract Letting

- All activities are completed before project can be let to construction
- Project contract information is prepared/advertised
- Contractors submit bids
- Low bids are determined
- Award of project is determined based on bids





So how long does it take to complete preconstruction activities?

- Heavily dependent upon project complexity
- Range of impacts
- Public will
- Utility Conflicts
- Number of parcels and relocations involved





Typical Project Durations (from beginning of planning to letting)

- Major new location projects (ten to twelve years)
- Widening projects (seven to eight years)
- Bridge projects (one to four years)





Typical Project Construction Durations

- New Location – 3 ½ - 4 Years
- Major Pavement Rehabilitation - 2 ½ - 3 Years
- Urban Widening - 2 - 3 Years
- Bridge Replacement (low impact) - 6–18 months





Construction Process – Typical Steps

- 1) Surveying
- 2) Clearing
- 3) Erosion Control
- 4) Bottom Drainage
- 5) Rough Grading
- 6) Bridge Foundations
- 7) Top Drainage
- 8) Fine Grading
- 9) Base and Pave
- 10) Bridge Beams and Deck
- 11) Guardrail
- 12) Markings, Signs, Signals





Survey





Clearing





Erosion Control





Bottom Drain Pipe and Culverts





Rough Grading



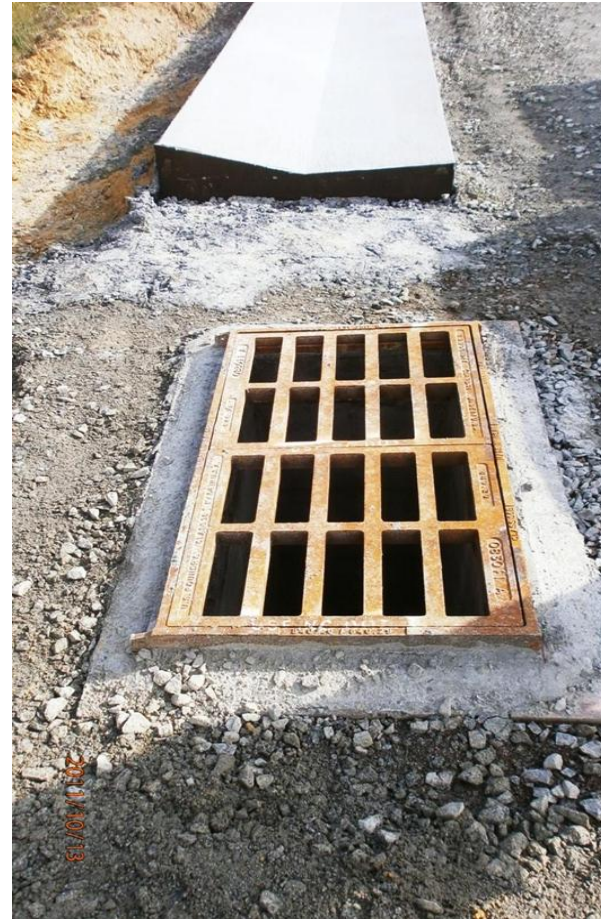


Bridge Foundations





Top Drainage





Fine Grading





Base and Pave





Bridge Beams and Deck





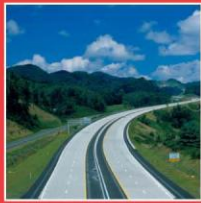
Guardrail





Pavement Markings, Signs, Signals





Questions?

